

FIGURE 1

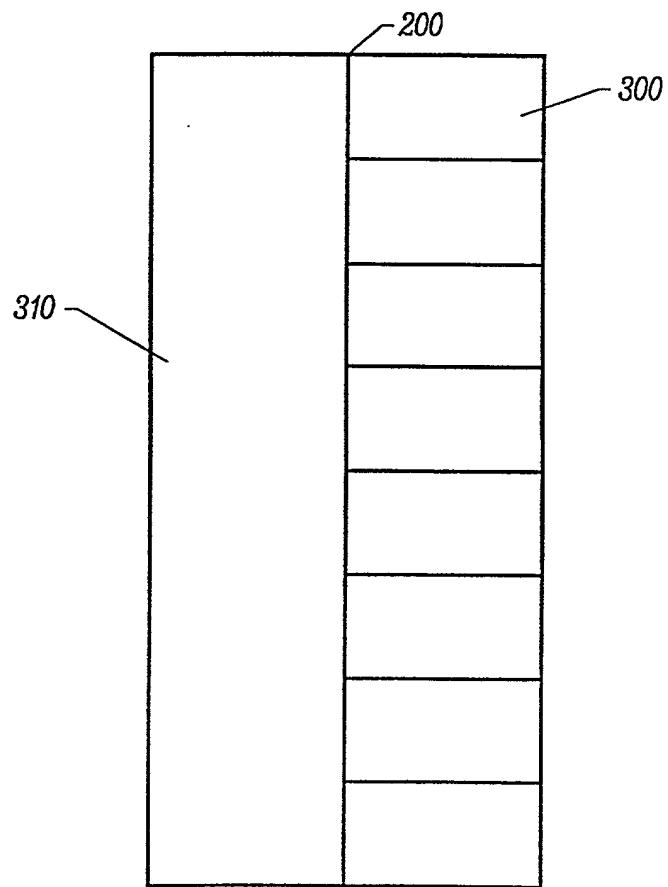
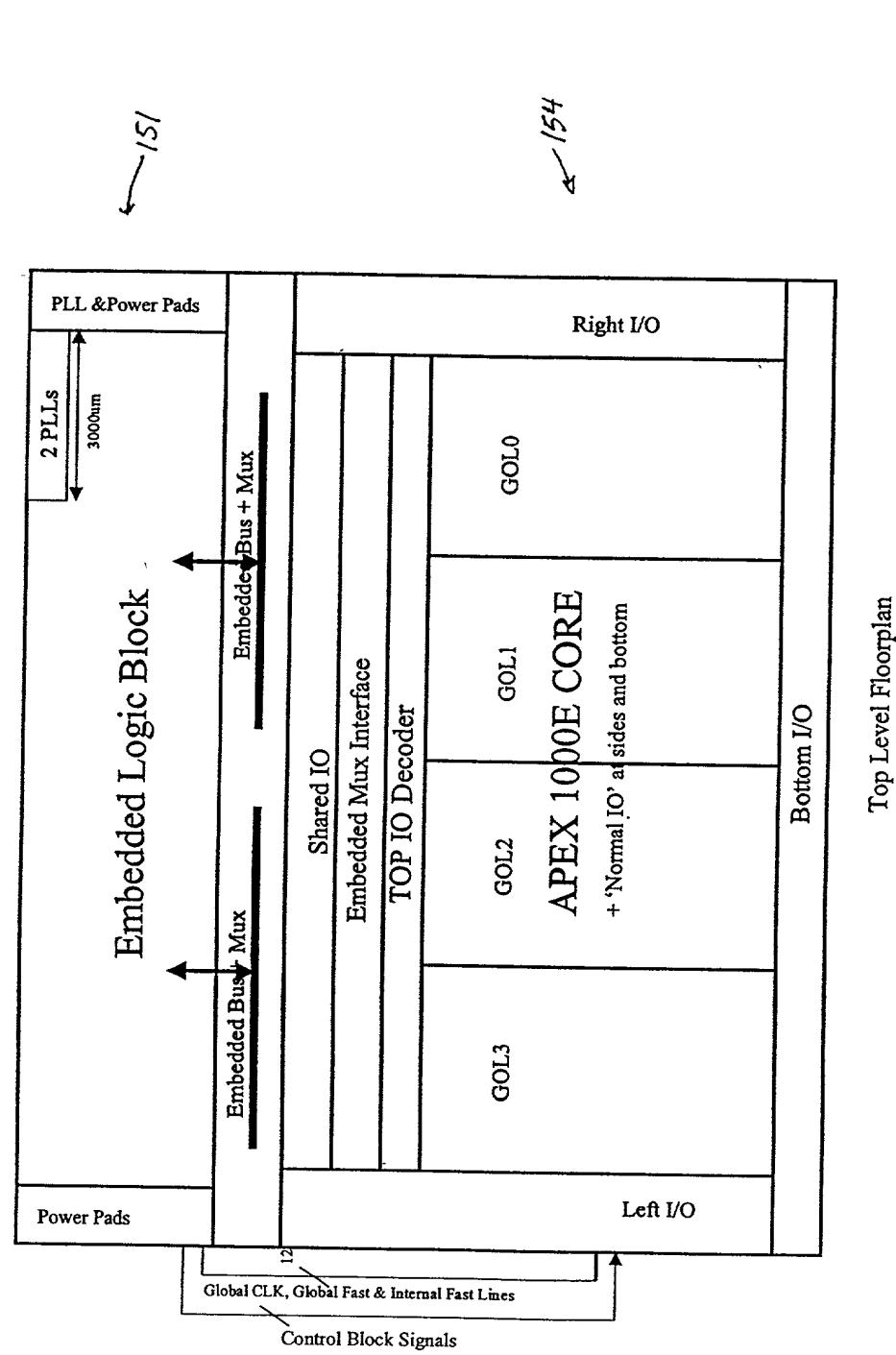
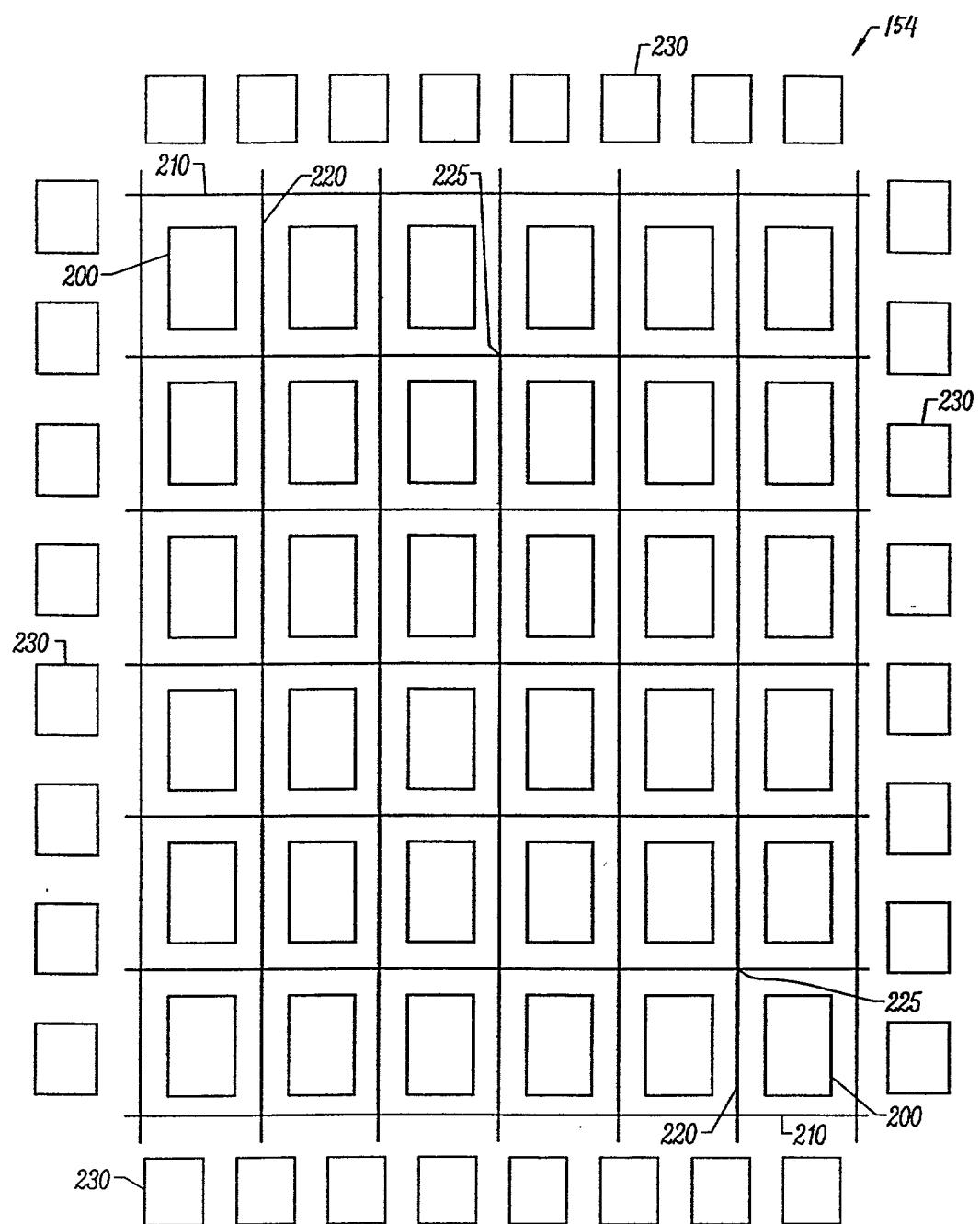


FIGURE 4

FIGURE 2





### FIGURE 3

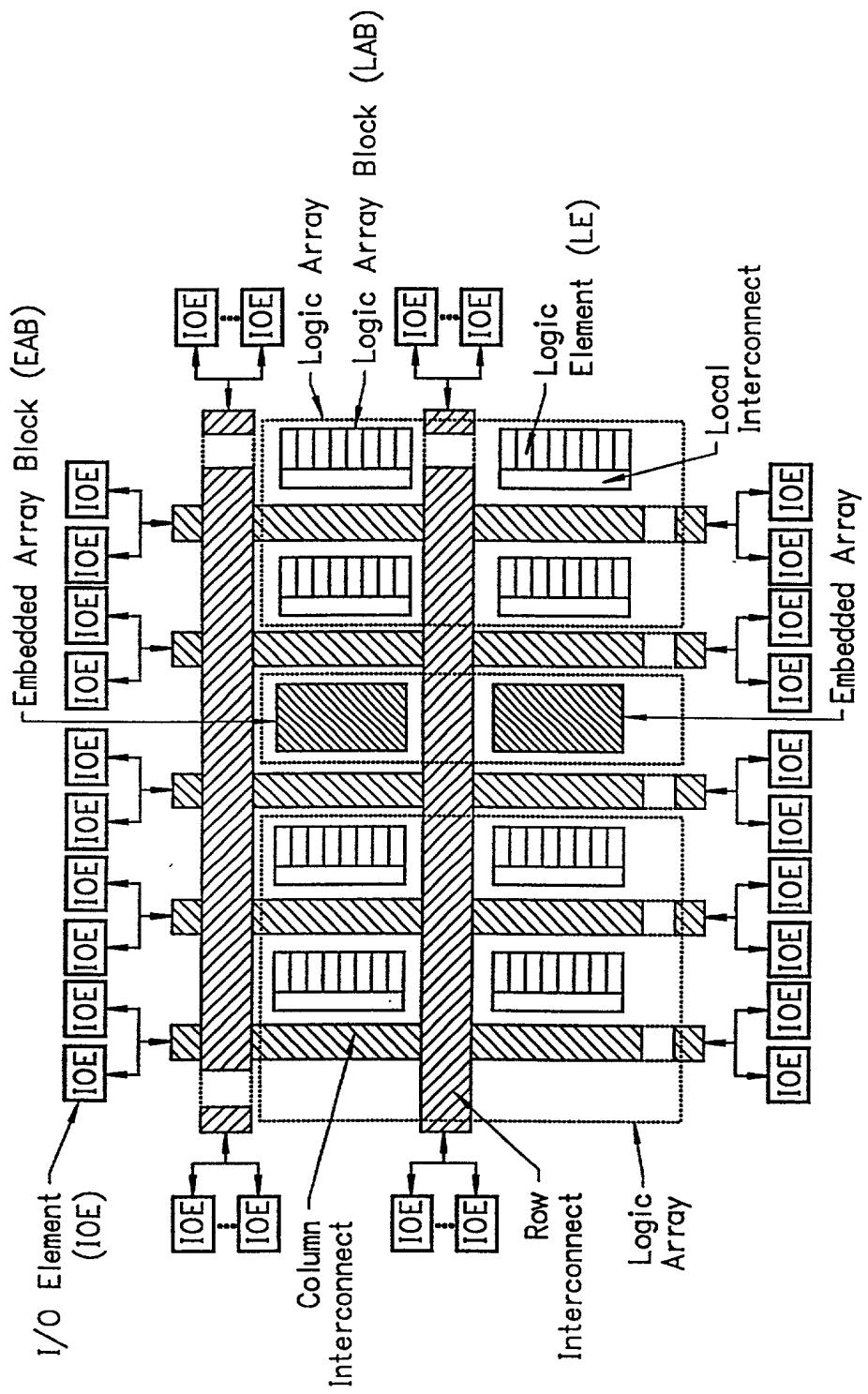


FIGURE 5

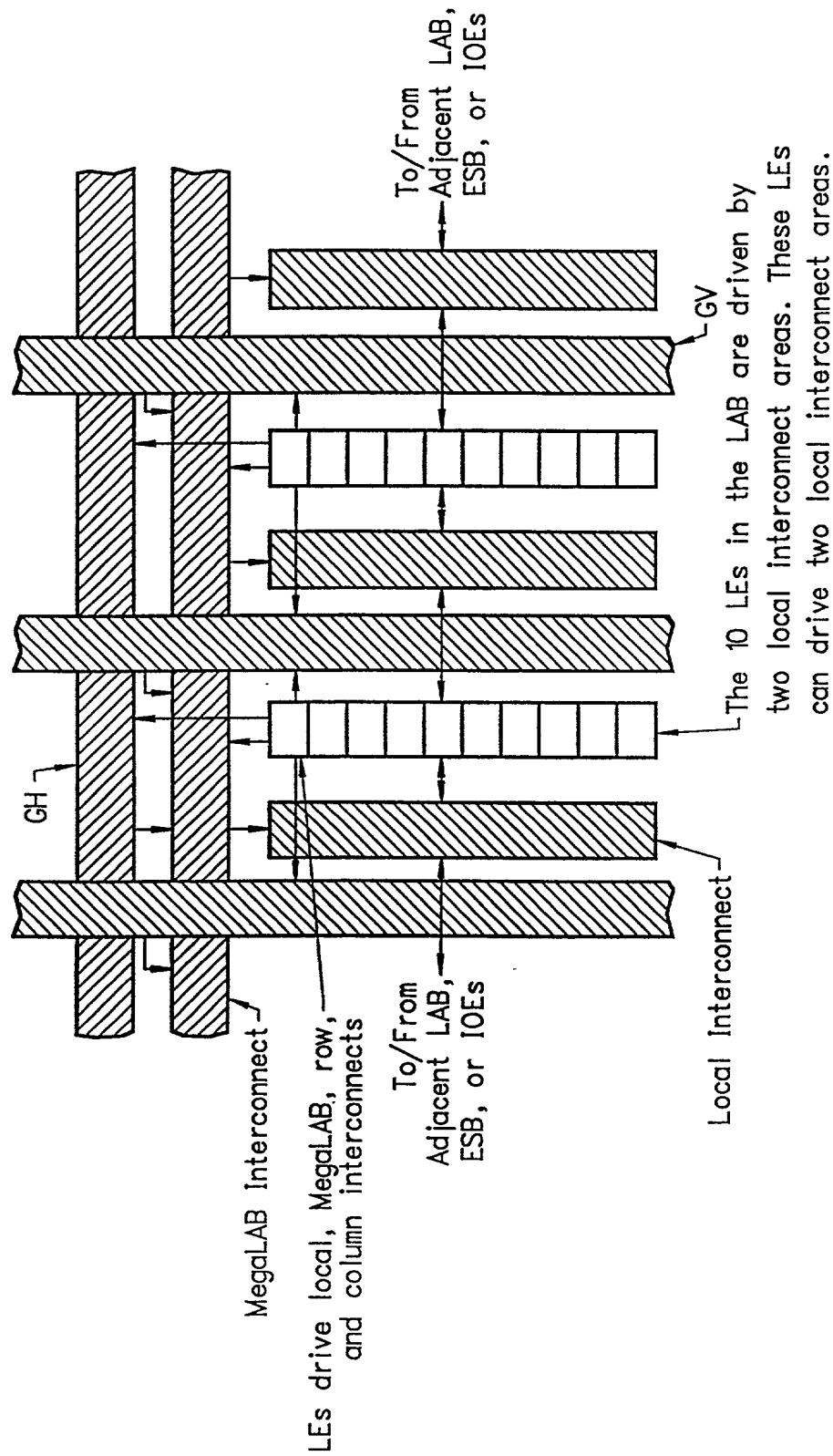
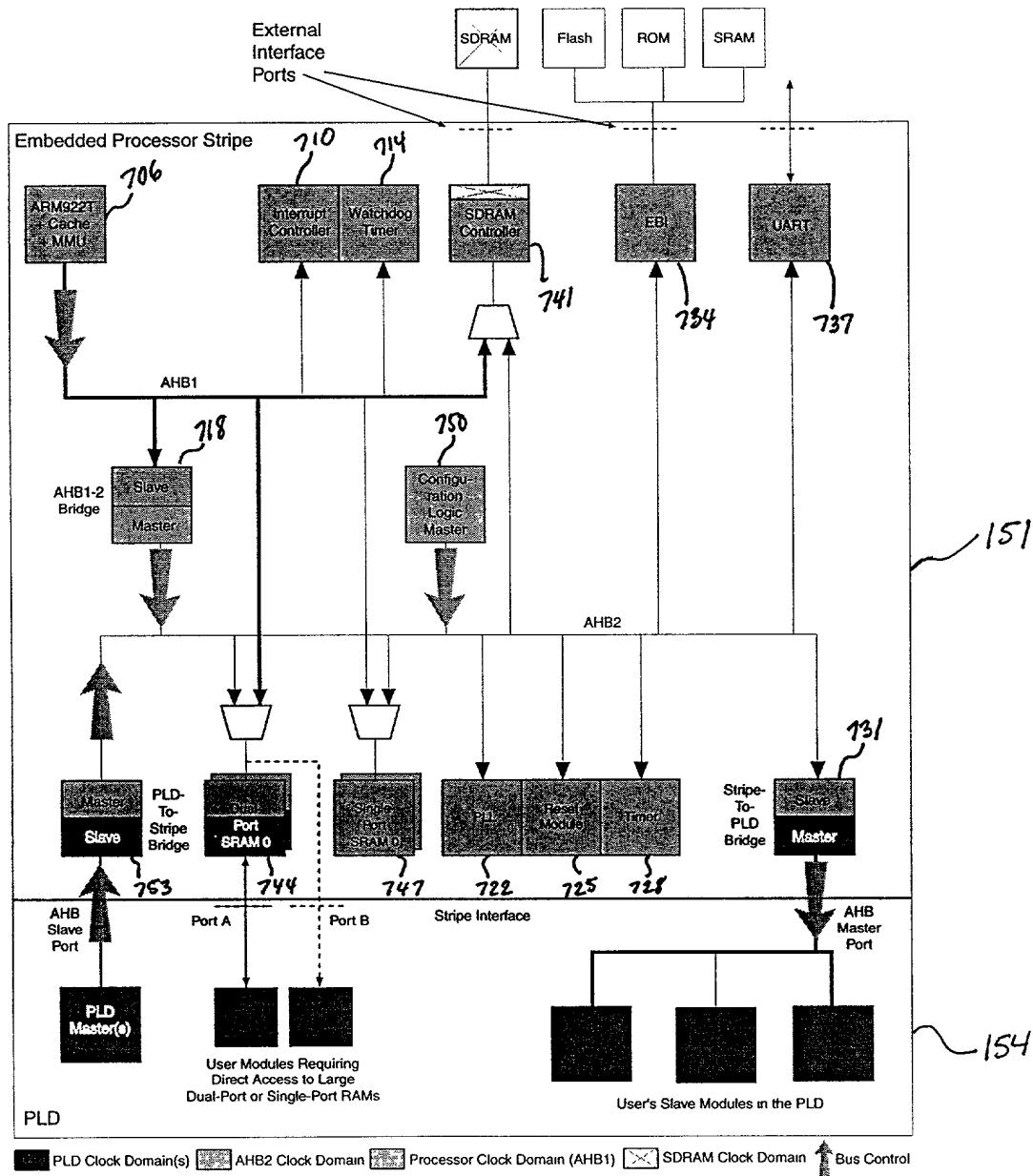
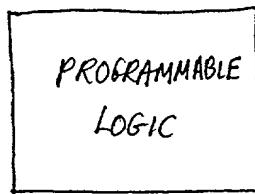


FIGURE 6

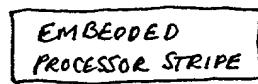


**FIGURE 7**

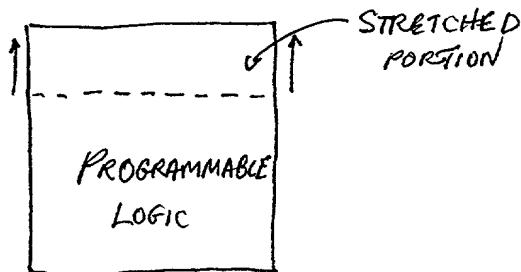
**FIGURE 8**



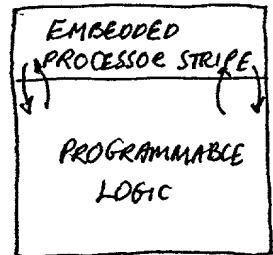
**FIGURE 9**



**FIGURE 10**



**FIGURE 11**



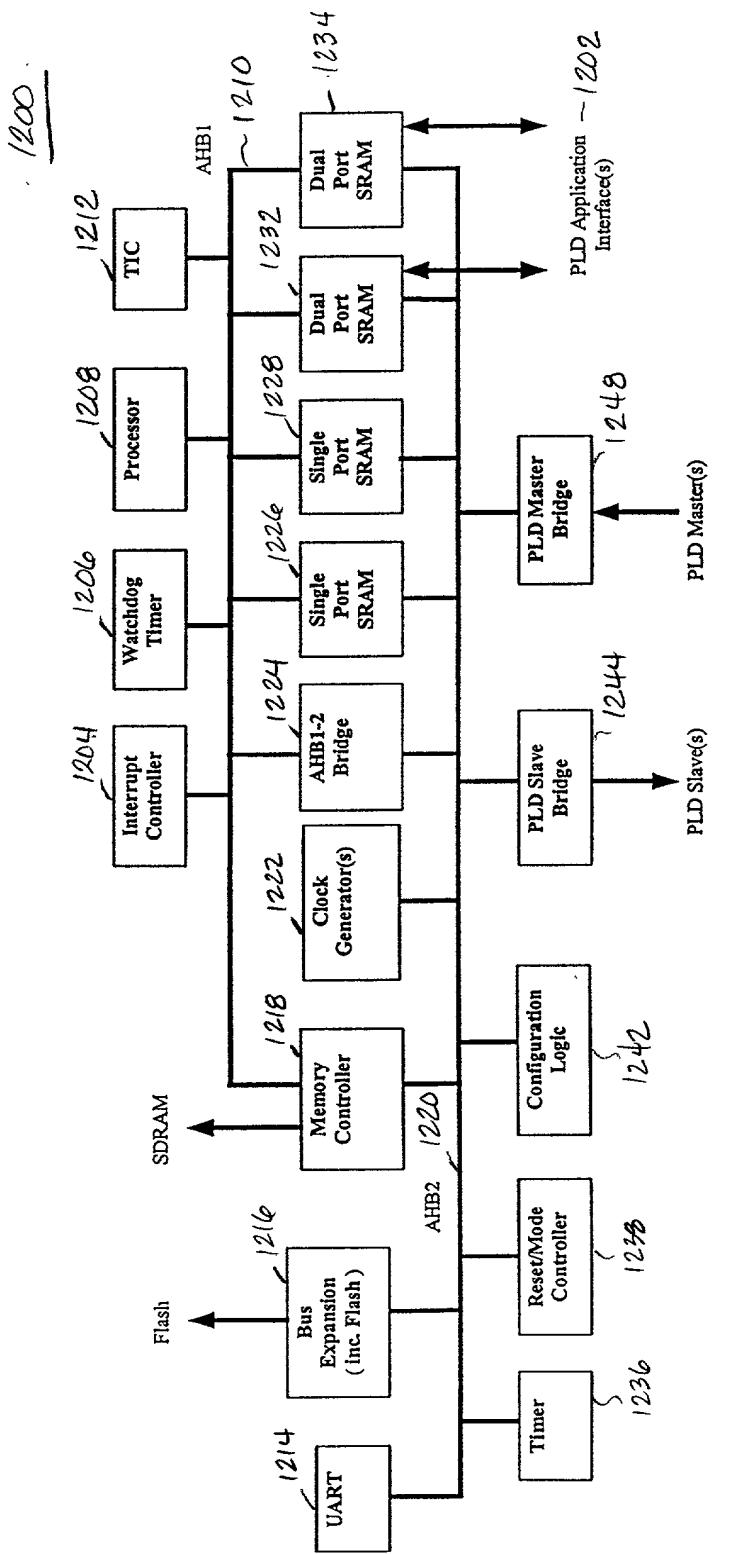


FIGURE 12

32

8K

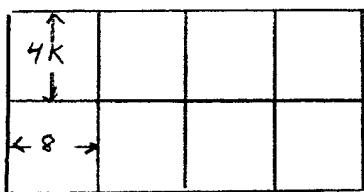


FIGURE 13A

8Kx32

16

16K

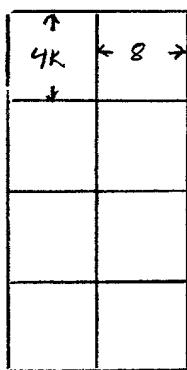


FIGURE 13B

16Kx16

8

32K

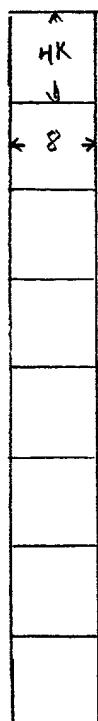


FIGURE 13C

32Kx8

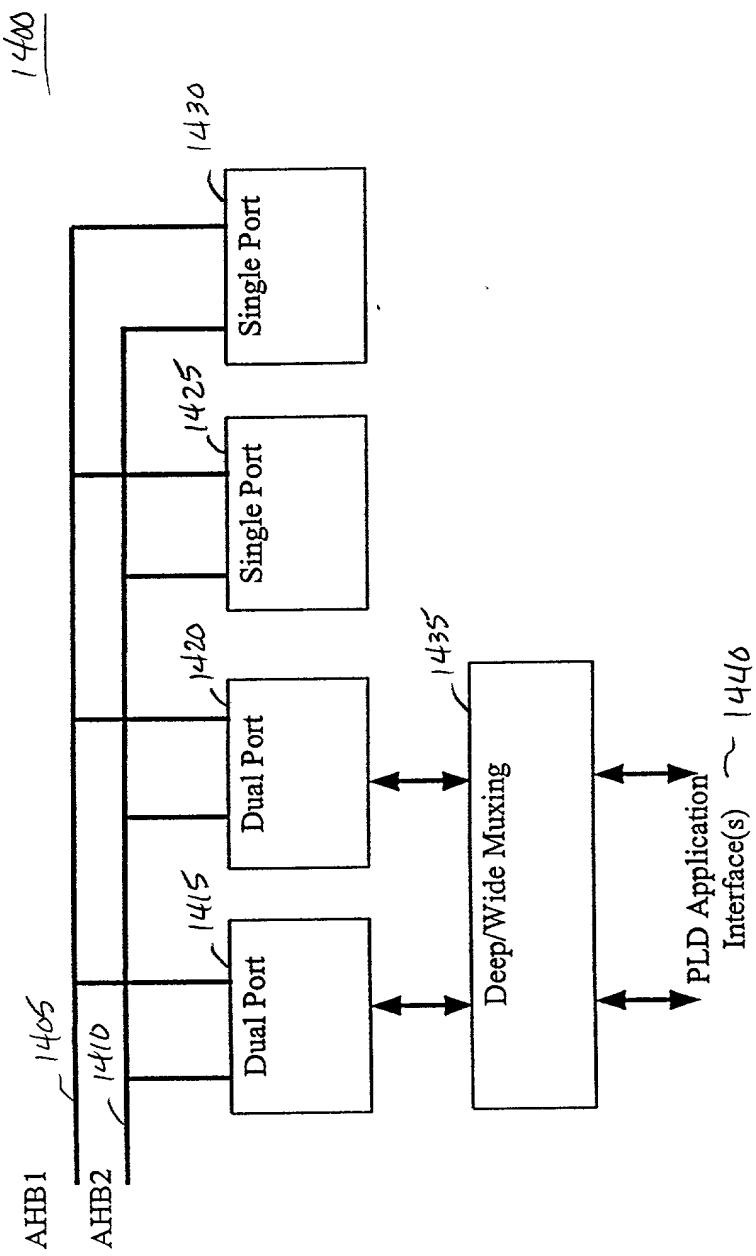


Figure 14

1500

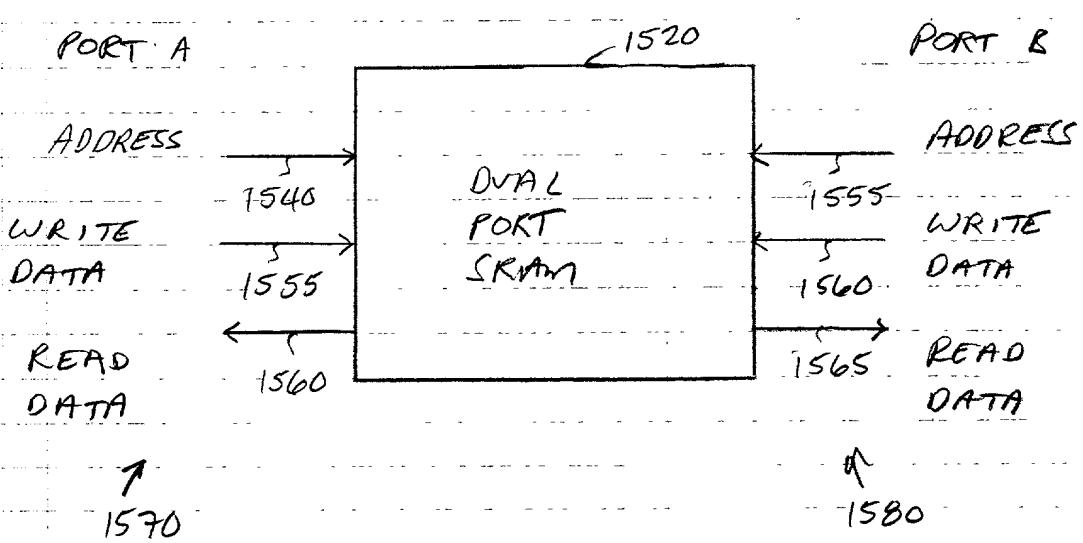
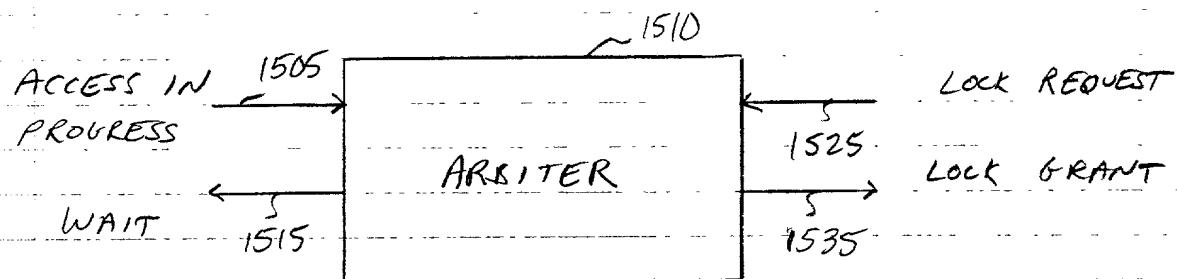


FIGURE 15.

1600

~1670

PORT A

~1680

ARB ITER

~1690

PORT B

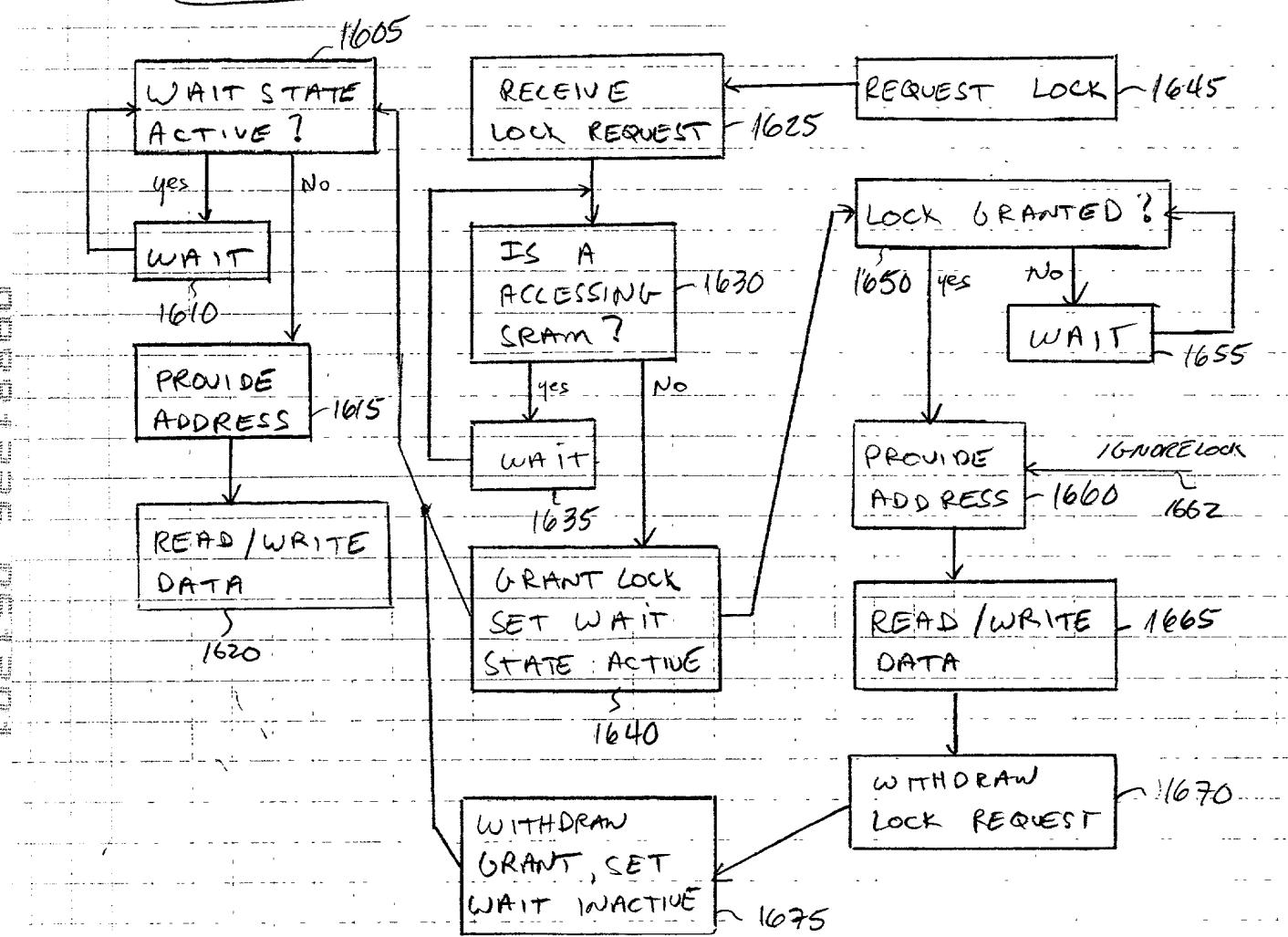


FIGURE 16

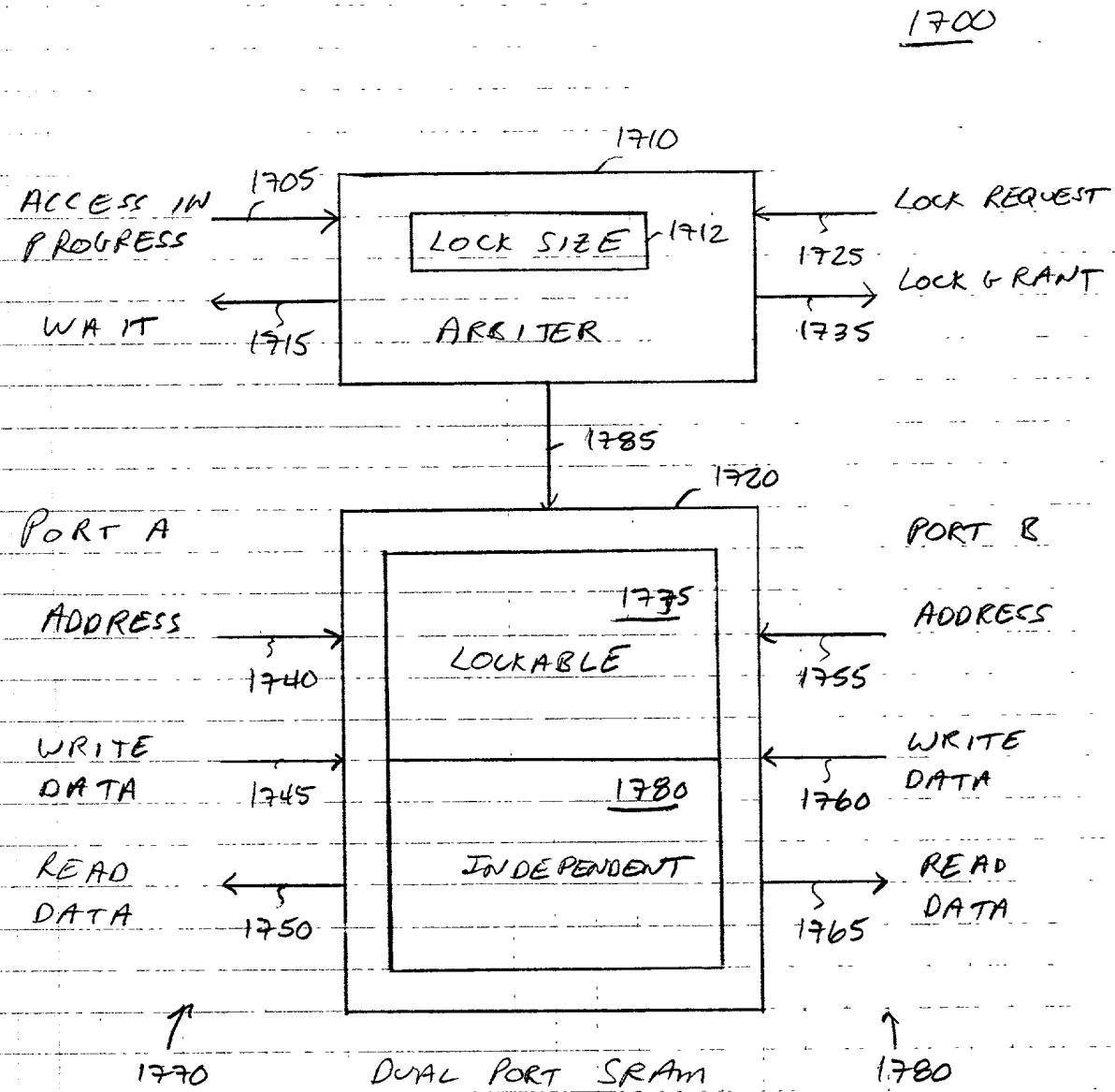


FIGURE 17

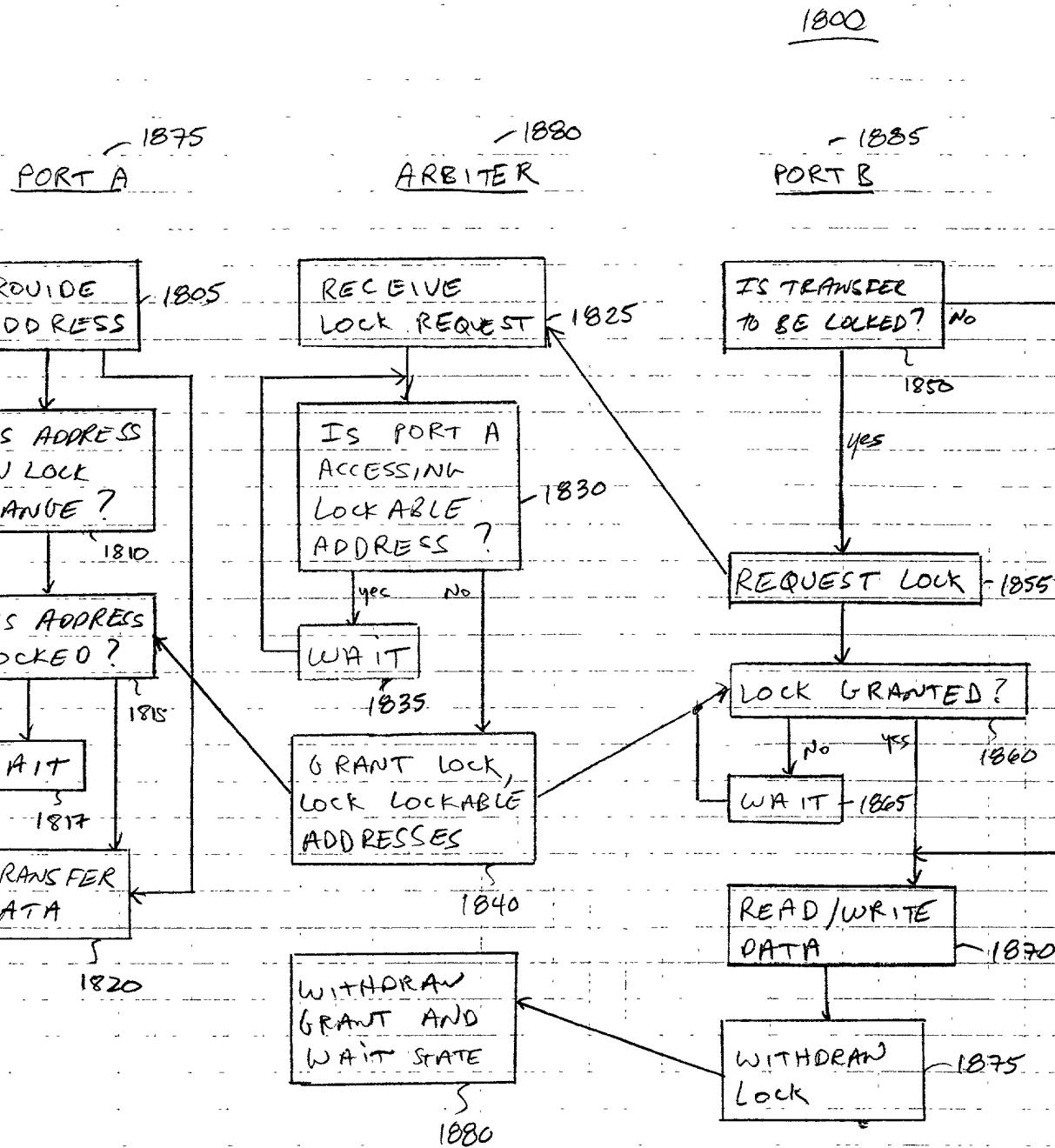


FIGURE 18

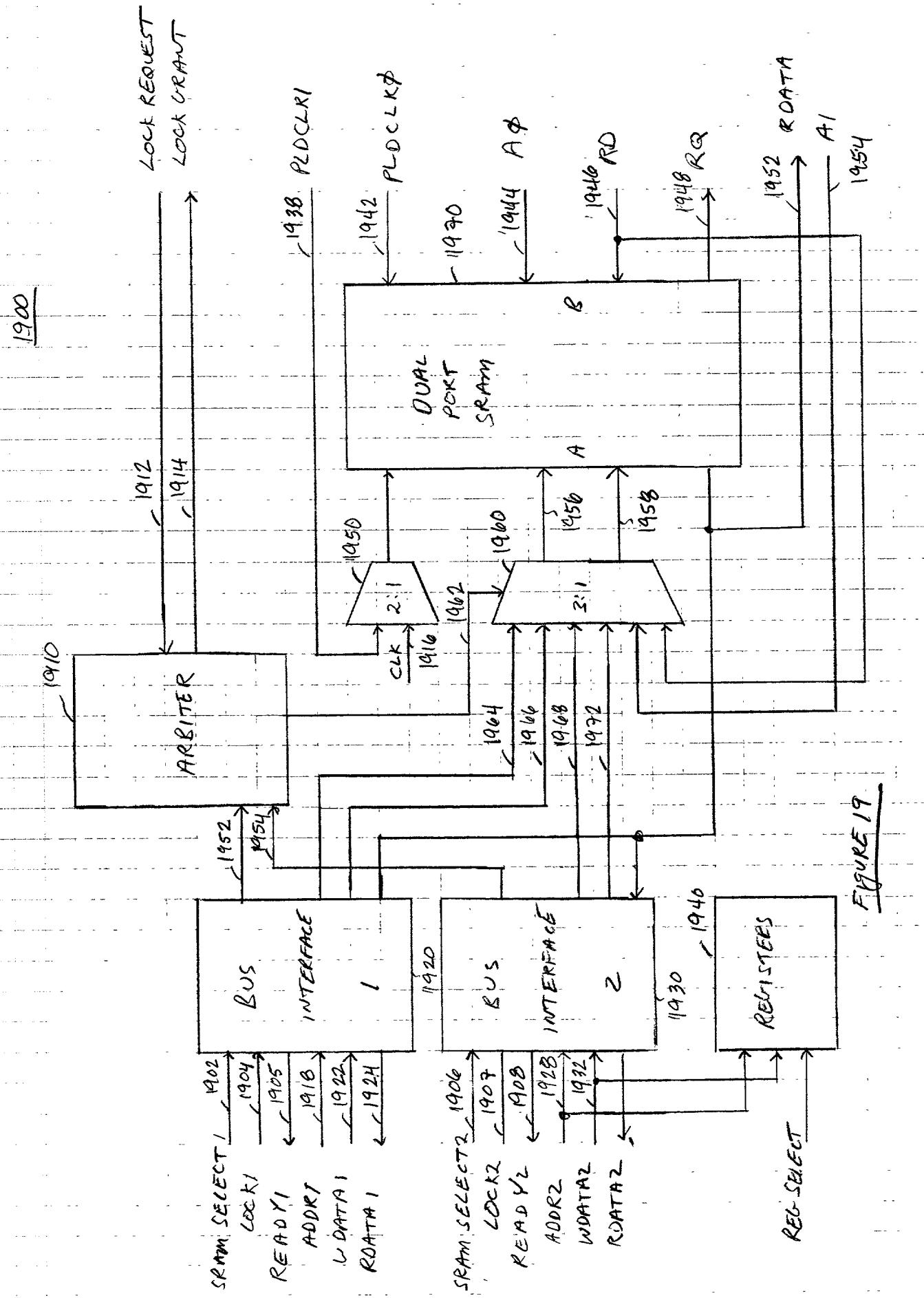


FIGURE 19

PORT A

2010  
INTERFACE 1

2030

ARBITRATION  
BETWEEN  
INTERFACES  
INT. 1 & 2

2040

PORT B

2035

ARBITRATION  
BETWEEN  
PORTS A & B

2000

IS TRANSFER  
TO BE LOCKED?

2002

ASSERT  
REQUEST

2004

ASSERT  
REQUEST/LOCK

2006

RECEIVE  
READY

2008

TRANSFER  
DATA

2010

DE-ASSERT  
REQUEST/LOCK

2012

IS ADDRESS  
IN LOCK RANGE?

2014

HAS B  
LOCKED?

2016

TRANSFER  
DATA

2018

SEND  
READY

2020

ASSERT  
REQUEST/LOCK

2022

RECEIVE  
READY

2024

TRANSFER  
DATA

2026

DE-ASSERT  
REQUEST/LOCK

2028

IS PORT A  
ACCESSING  
IN LOCK  
RANGE?

2030

SEND  
LOCK

2032

RECEIVE  
LOCK GRANT

2034

DE-ASSERT  
LOCK IF  
SENT

2036

IS TRANSFER  
TO BE LOCKED?

2038

SEND  
LOCK GRANT

2040

DE-ASSERT  
LOCK GRANT

2042

DE-ASSERT  
LOCK IF  
SENT

2044

IS TRANSFER  
TO BE LOCKED?

2046

SEND  
LOCK

2048

RECEIVE  
LOCK

2050

DE-ASSERT  
LOCK IF  
SENT

2052

IS TRANSFER  
TO BE LOCKED?

2054

SEND  
LOCK

2056

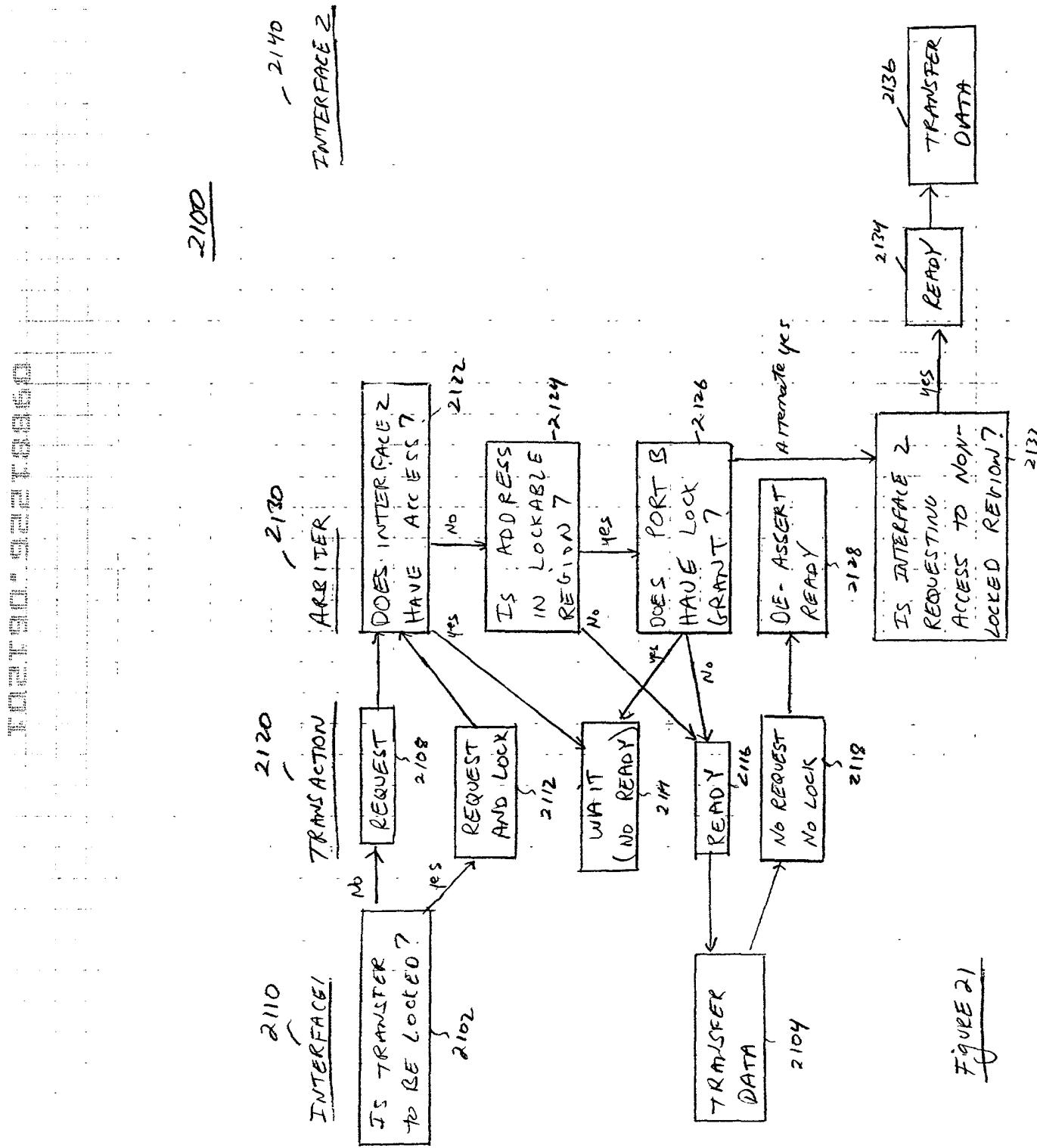
RECEIVE  
LOCK

2058

DE-ASSERT  
LOCK IF  
SENT

2060

FIGURE 20



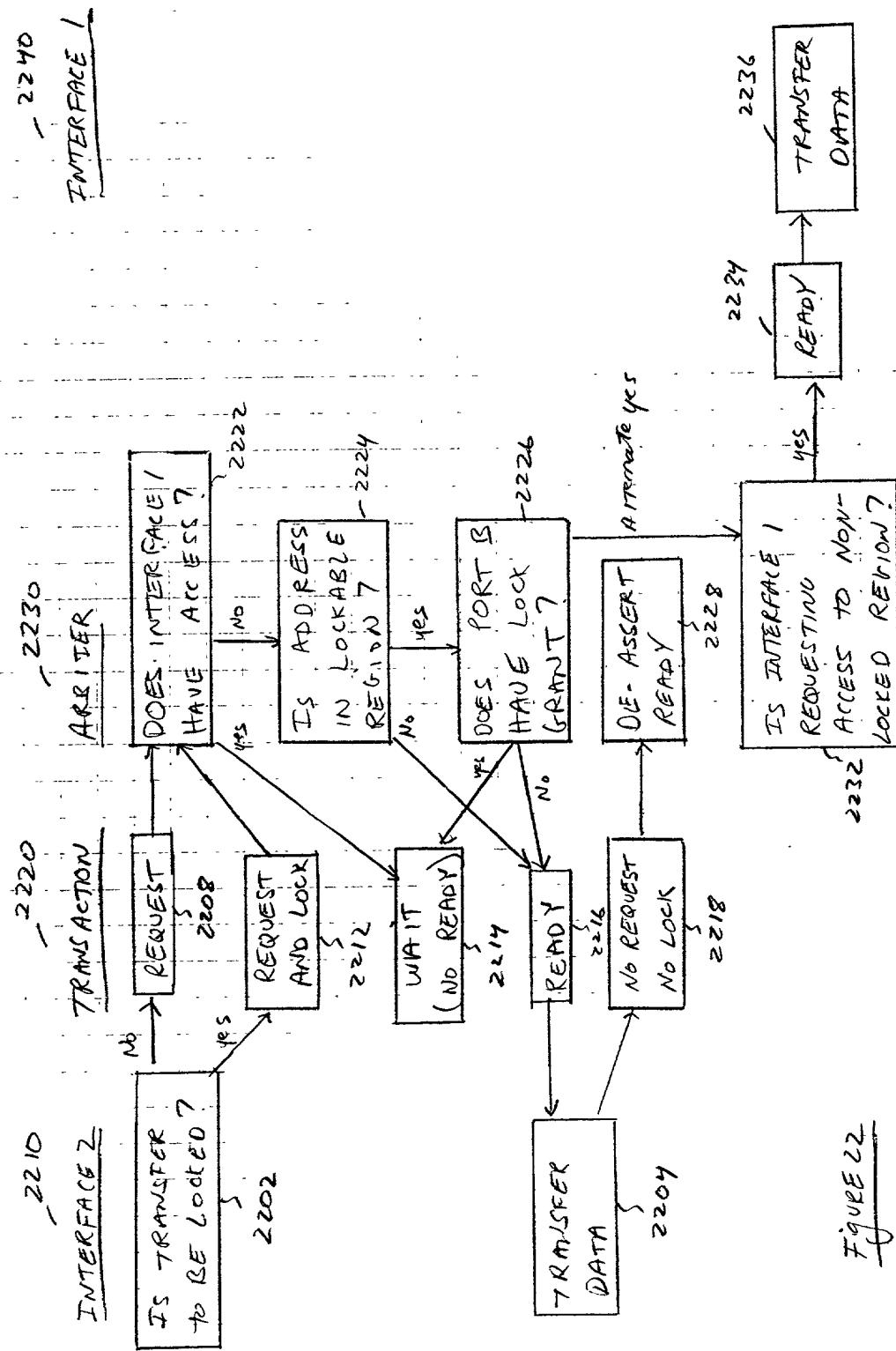
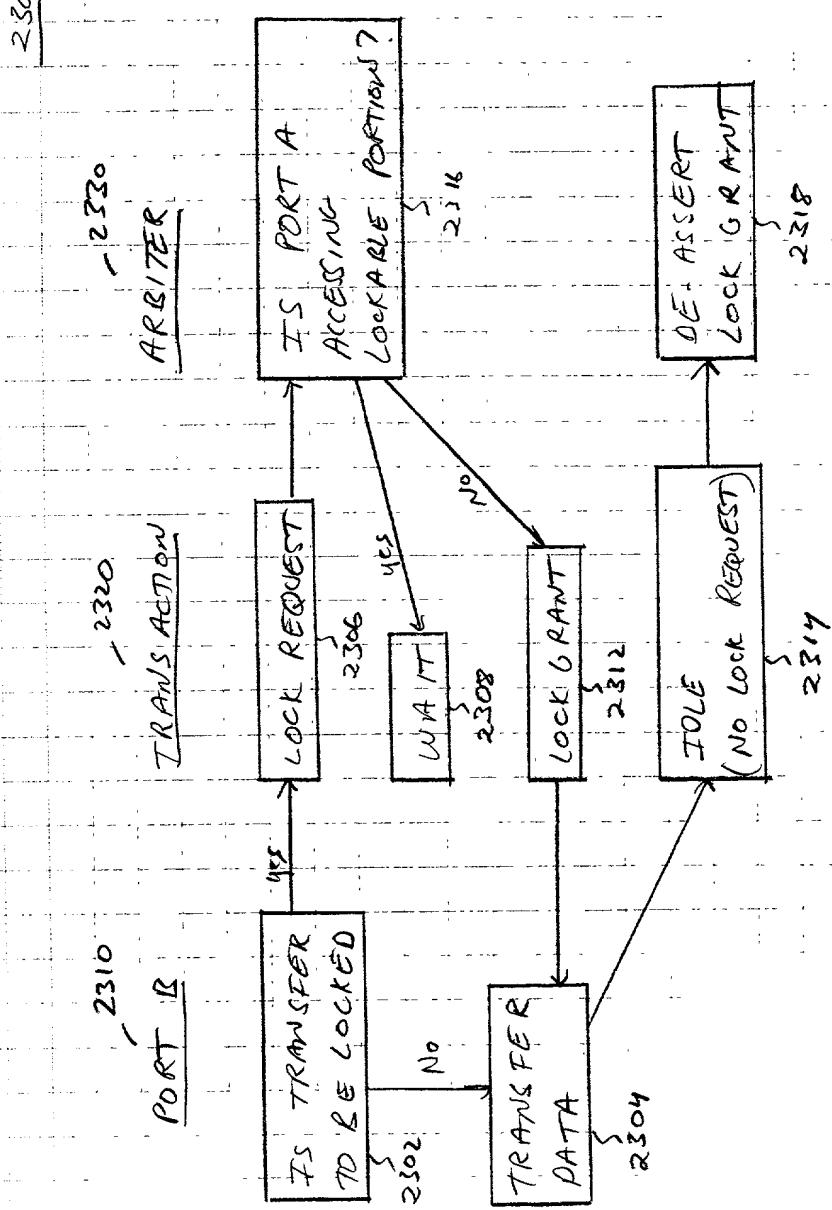


Figure 22

Figure 23



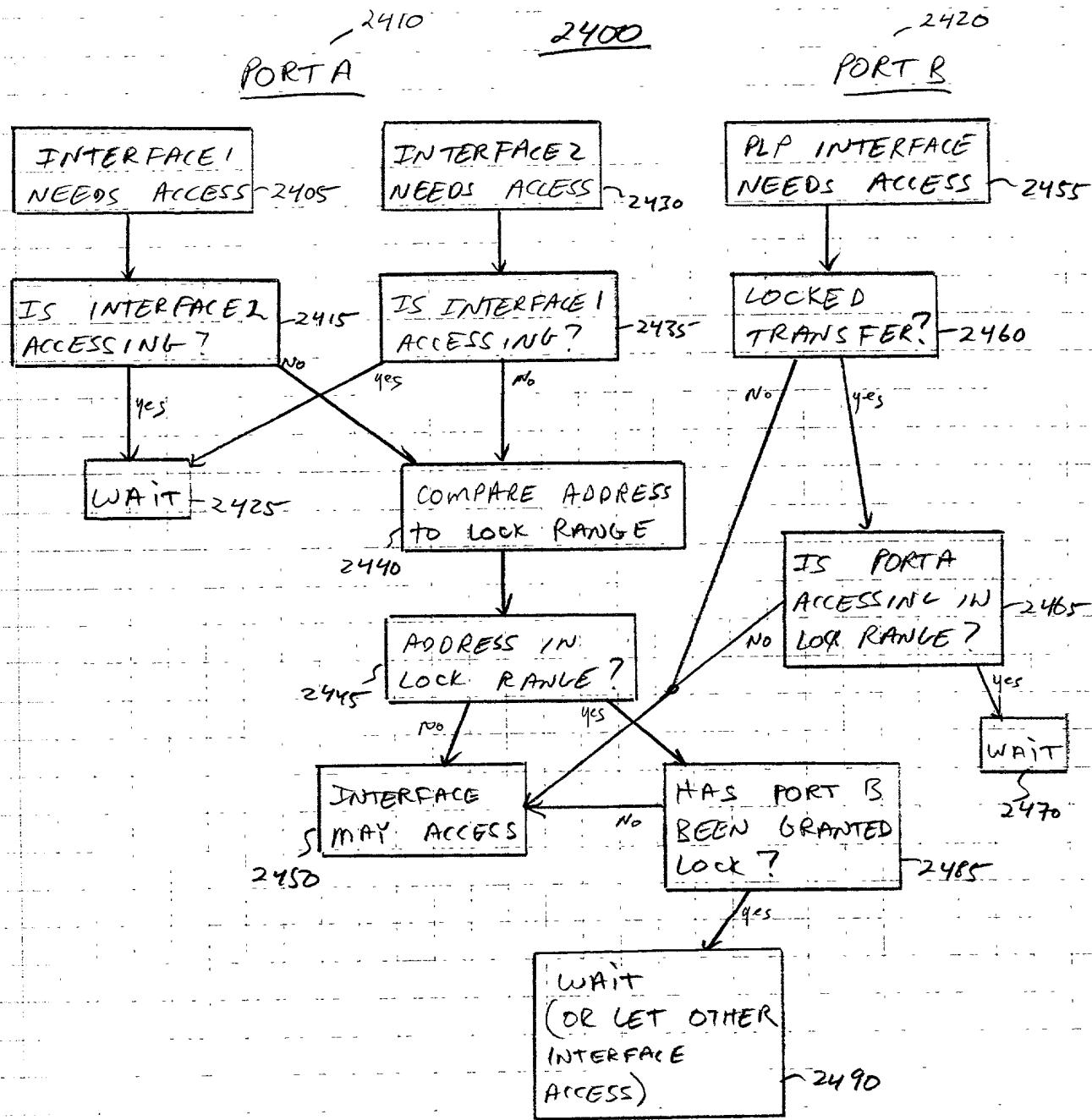


FIGURE 24

2500

Dual Port SRAM  
AND ASSOCIATED CIRCUITRY

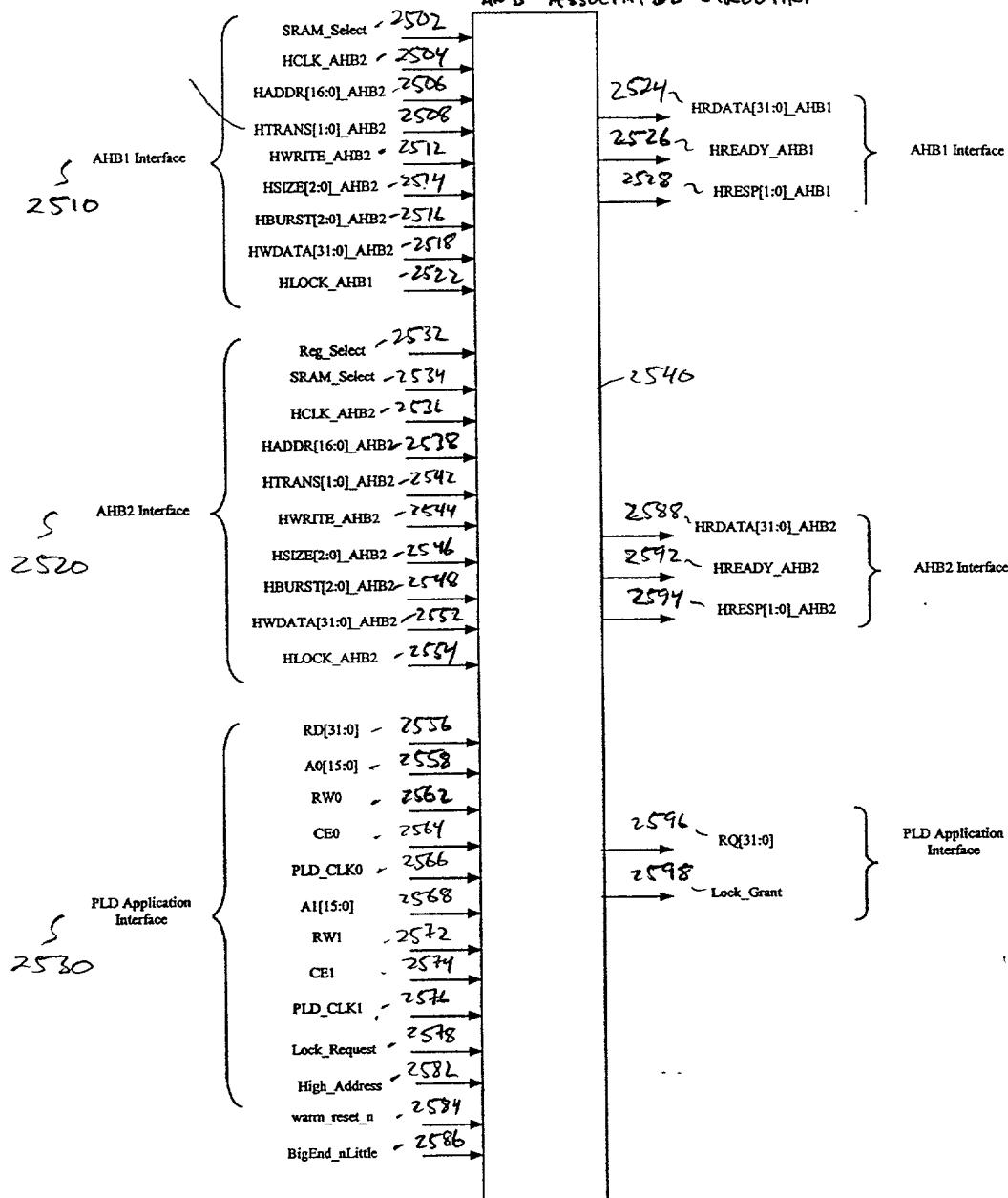


FIGURE 25